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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,897	07/30/2003	Itaru Sakou	1448.1042	6247

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EXAMINER	
LIN, JERRY	

ART UNIT	PAPER NUMBER
1631	

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,897	SAKOU, ITARU	
	Examiner	Art Unit	
	Jerry Lin	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-30* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-11, 25, 26, 28, and 29, drawn to a method of predicting gene expression sites by determining the expression sites of the first gene based on distance, classified in class 702, subclass 19. (A species election is required for this Group)

II. Claims 12-24, 27 and 30 drawn to a method of predicting gene expression sites that includes sorting a plurality of second genes in ascending order of distance, and outputting the information of the expression sites of the second gene at the sorting , classified in class 702, subclass 19. (A species election is required for this Group)

The inventions are distinct, each from the other because of the following reasons:

Groups I and II are directed to related processes. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, Groups I and II have different method steps. Since the method steps are different, Groups I and II do not overlap in scope. Secondly, the different method steps are not obvious variants.

Finally, since Groups I and II have different method steps, the processes have different modes of operation and function.

Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Species Election for Group I

If Group I is elected, this group contains claims directed to the following patentably distinct species:

Species A, claim 3, drawn to calculating the distance between the start position of the first gene and the start position of the second gene.

Species B, claim 4, drawn to calculating the distance between the end position of the first gene and the end position of the second gene.

Species C, claim 5, drawn to calculating the distance between the start position of the first gene and the end position of the second gene.

Species D, claim 6, drawn to calculating the distance between the end position of the first gene and the start position of the second gene.

Species E, claim 7, drawn to calculating the distance between the first and second positions, the first position being between the start and end positions of the first

gene and the second position being between the start and end positions of the second gene.

Species F, claim 8, drawn to calculating a distance between a position between the start and end positions of the first gene and the start position of the second gene.

Species G, claim 9, drawn to calculating the distance between the start and end positions of the first gene and the end position of the second gene.

Species H, claim 10, drawn to calculating a distance between the start position of the first gene and the position between the start and end positions of the second gene.

Species I, claim 11, drawn to calculating a distance between the end position of the first gene and a position between the start and end positions of the second gene.

The species are independent or distinct because each of the instant claims is drawn to a different method of calculating. Species A-I are directed to related processes. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the species as claimed are not obvious variants; and the species as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, the species are each drawn to a different method of calculating. Since the method steps are different for each species, the species do not overlap in scope and are not obvious variants. Furthermore, the different steps indicated that each species have different modes of operation and function.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, 1, 2, 28 and 29 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Species Election for Group II

If Group II is elected, this group contains claims directed to the following patentably distinct species:

Species J, claim 15, drawn to calculating the distance between the start position of the first gene and the start position of the second gene.

Species K, claim 16, drawn to calculating the distance between the end position of the first gene and the end position of the second gene.

Species L, claim 17, drawn to calculating the distance between the start position of the first gene and the end position of the second gene.

Species M, claim 18, drawn to calculating the distance between the end position of the first gene and the start position of the second gene.

Species N, claim 19, drawn to calculating the distance between the first and second positions, the first position being between the start and end positions of the first gene and the second position being between the start and end positions of the second gene.

Species O, claim 20, drawn to calculating a distance between a position between the start and end positions of the first gene and the start position of the second gene.

Species P, claim 21, drawn to calculating the distance between the start and end positions of the first gene and the end position of the second gene.

Species Q, claim 22, drawn to calculating a distance between the start position of the first gene and the position between the start and end positions of the second gene.

Species R, claim 23, drawn to calculating a distance between the end position of the first gene and a position between the start and end positions of the second gene.

Species S, claim 24, drawn to calculating with a threshold of distance.

The species are independent or distinct because each of the instant claims is drawn to a different method of calculating. Species J-S are directed to related

processes. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the species as claimed are not obvious variants; and the species as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, the species are each drawn to a different method of calculating. Since the method steps are different for each species, the species do not overlap in scope and are not obvious variants. Furthermore, the different steps indicated that each species have different modes of operation and function.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, 12-14, 27 and 30 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Conclusion

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Lin whose telephone number is (571) 272-2561. The examiner can normally be reached on 10:00am-6:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, Ph.D. can be reached on (571) 272-0718. The fax phone

number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Representatives are available to answer your questions daily from 6 am to midnight (EST). When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center at (800) 786-9199.

MICHAEL BORIN, PH.D
PRIMARY EXAMINER

JL